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PATENT

In the Specification:

Please cancel the "SEQUENCE LISTING", pages 1-280, submitted on November 27, 2001, and insert therefor the accompanying paper copy of the Substitute Sequence Listing, page numbers 1 to 285, at the end of the application.

In the Claims:

Please amend claims 119-125 as follows:

II
119. (Amended) A recombinant or synthetic polynucleotide encoding a protein that comprises each of the following structures:

a) Trp-R₁-X₇-R₁-R₂-X-Phe-Phe-Tyr-X-Thr-Glu-X_{8,9}-R₃-R₃-Arg-R₄-X₂-Trp (SEQ ID NOS:16 and 17)

b) X₃-Arg-X₂-Pro-Lys-X₃ (SEQ ID NO:139)

c) X-Arg-X-Ile-X (SEQ ID NO:143)

d) X₄-Phe-X₃-Asp-X₄-Tyr-Asp-X₂ (SEQ ID NO:144)

e) Tyr-X₄-Gly-X₂-Gln-Gly-X₃-Ser-X₈ (SEQ ID NO:146)

f) X₆-Asp-Asp-X-Leu-X₃ (SEQ ID NO:147)

wherein R₁ is Leu or Ile; R₂ is Gln or Arg; R₃ is Phe or Tyr; R₄ is Lys or His, and X_n represents the number n of consecutive unspecified amino acids;

and wherein the protein has telomerase catalytic activity when complexed with a telomerase RNA component.

120. (Amended) The polynucleotide of claim 120, encoding a protein that comprises the structure Trp-Leu-X-Tyr-X₂-h-h-X-h-h-X-p-Phe-Phe-Tyr-X-Thr-Glu-X-p-X₃-p-X₃-Tyr-X-Arg-Lys-X₂-Trp (SEQ ID NO:116); wherein h is a hydrophobic